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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/688,389

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Mitsuhide Takamura

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

KUMAR, RAKESH

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,389	<b>Applicant(s)</b> TAKAMURA, MITSUhide	
	<b>Examiner</b> RAKESH KUMAR	<b>Art Unit</b> 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **Detailed Action**

### ***Continued Prosecution Application***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed 10/26/2007 on has been entered.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,7,9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (U.S. Patent Number 6,963,722) in view of Mandel (U.S. Patent Number 5,289,251) and in further view of Endo (U.S. Patent Number 6,357,743).

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3. Referring to claim 1. Matsumoto discloses a sheet processing apparatus 10, comprising:

sheet conveying means (rollers 78, 79 and 80; Figure 1) for conveying sheets (P);

first loading means (421X; Figure 4) for loading a sheet bundle comprising a plurality of sheets conveyed by the sheet conveying means (Col. 10 lines 19-44; Figure 16 and Figure 17);

first and second lateral aligning means (418, 412, 412A and 412B; Figure 4, 7 and 23) for aligning the opposite side edges (edge contacting stopper 418) of the sheet bundle loaded on the first loading means (421X) in the direction perpendicular (position of the stopper 418) to the sheet conveying direction (direction of rotation of belt 421; Figure 4 and see Figure 7) by moving between retreat positions out of contact (see position of members 412A and 412B near s6 and s7; Figure 7) with the sheet bundle and lateral aligning positions in contact with the sheet bundle (during aligning);

stapling means (419) for performing a stapling treatment with respect to a sheet bundle aligned by the lateral alignment means (418, 412, 412A and 412B; Figure 4, 7 and 23);

sheet bundle conveying means (421) for conveying a sheet bundle stapled by the stapling means (419);

second loading means (411) for loading sheet bundles conveyed by the sheet bundle conveying means (421); and

loading position control means (controller for alignment means; Col 11 lines 45-56) for controlling **a time** at which the first and second lateral means (412A and 412B) move from their aligning positions to their retreat positions for each sheet bundle (Col. 11 Line 45-56) in loading sheet bundles to be loaded onto the second loading means (411) to displace the loading positions on the second loading means of succeeding sheet bundles from each other along a perpendicular direction to the sheet conveying direction (Col. 8 line 14); wherein the first and the second lateral aligning means move together (Col.10. lines 55-64).

Matsumoto does not specifically disclose the loading sheet bundles to be loaded on the second loading means to displace the bundles from each other along the sheet conveying directions (see Figure 4).

Mandel discloses an apparatus wherein the sheet bundles to be loaded on the second loading means are displaced from each other along the sheet conveying directions (Figure 1).

Endo discloses an apparatus wherein the sheet bundles are aligned by selectively moving alignment members (51 A and 51B; Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Matsumoto and include offsetting the sheet bundles in conveying direction as taught by Mandel and further selectively move the individual alignment members to align the sheet bundles because offsetting sheet bundles in the conveying direction would reduce the width of the apparatus.

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4. Referring to claim 2. Matsumoto discloses a sheet processing apparatus 10, wherein the second loading means (411) is disposed below the first loading means (421X; Figure 4).

5. Referring to claim 7. Matsumoto discloses a sheet processing apparatus 10, comprising longitudinal alignment means (417) for aligning a sheet bundle (P) loaded on the first loading means (421X; Figure 4) in the sheet conveying direction (direction of rotation of belt 421; Figure 4) (Col. 8, line 30-48).

6. Referring to claim 13. Matsumoto discloses a sheet processing apparatus 10, comprising full load detecting means (423 and S10) for detecting the full load state of sheet bundles (P) on the second loading means (411; Col. 12, line 52-59).

7. Referring to claim 9. Matsumoto discloses a sheet processing apparatus 10, wherein the sheet conveying means (rollers 78, 79 and 80; Figure 1) and the sheet bundle conveying means (421) are driven by a different driving source (Figure 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel and in further view of Endo to drive both the sheet conveying means and the sheet bundle conveying means by a single driving source. Such a selection would be well within the level of skill of an artisan.

8. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view Mandel and in further view of Endo as applied to claim 1 above, and further in view of Chung (U.S. Patent Number 6,231,039).

9. Referring to claim 6. Matsumoto discloses a sheet processing apparatus 10, wherein the lateral alignment means (418, 412, 412A and 412B; Figure 4 and 23) comprises a first alignment member (418) that aligns the edge on one side of a sheet bundle (Col. 8 line 33-40) in the direction perpendicular to the sheet conveying direction (direction of rotation of belt 421; Figure 4), and a second alignment member (412A and 412B) that aligns the edge of the sheet bundle (P) on the side opposite to the one side (Figure 18, 23 and 24) thereof aligned by the first alignment member (418), and wherein the first (418) and second (412A and 412B) alignment members perform alignment of a sheet bundle (P) by moving to respective alignment positions bordering on the opposite side edges of the sheets (Figure 7).

Chung discloses an apparatus wherein the first and second alignment members (33, left and right side; Figure 9-13) let the aligned sheet bundle (39a) fall onto the second loading means (34) by moving to respective retreat positions (in direction C) that are spaced apart from each other by at least the length (Figure 13) of the sheet bundle (39a) in the width direction (Col. 6, line 58).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel and in further view of Endo to include a first and second alignment members that can be moved apart

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in the width direction of the sheet bundle and allow the bundle to fall onto the second tray as disclosed by Chang. As a result, cost can be reduced by not using a belt drive to maneuver the bundles to a second tray as disclosed by Matsumoto.

Matsumoto discloses a sheet processing apparatus 10, wherein the discharge convey speed of the sheet bundle is desirable to maintain a high ejection speed in order to achieve faster operation speed of the apparatus. Matsumoto further discloses that to achieve the high speed operation of the apparatus the discharge roller (415) must be operated at a high rotational speed, however it is evident that if the rollers are rotating at a high speed the sheet bundle will be ejected at a high speed and therefore miss positioning of the sheet bundle on the intermediate processing tray (421X), thus Matsumoto discloses that the high discharge roller speed must be slowed as the rear of the sheet bundle approaches the ejection point. As a result, controllably allow the sheet bundle to fall onto a predetermined position of the intermediate processing tray (421X) (Col. 13, line 13-39). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel and in further view of Endo such that the rotational speed of the discharging belt (421) can be switched and varied from an initial high speed to a low rotational speed to eject the sheet bundle at a staggered loading position onto the second loading tray as the two alignment members (412A and 412B) move to the retreat position to accept the next sheet bundle. As a result, the cost in production can be reduced.

Chung discloses an apparatus wherein the loading positions of sheet bundles (Figure 13) to be loaded onto the second loading means (34) in a staggered offset



alignment from each other in order to prevent the stapling positions of the sheet bundles from being superimposed on each other (Col. 2, line 20-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel and in further view of Endo to include staggering of the sheet bundle to keeping the staples from being superimposed on each other as taught by Chung to be able to stack a larger quantity of sheet bundles before having to remove them from the tray.

10. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view Mandel, Endo and Chung as applied to claim 6 above, and further in view of Watanabe et al. (U.S. Patent Number 5,447,298).

11. Referring to claims 8 and 14. See claim 7. Watanabe disclose a finisher apparatus comprising sheet hold-down means (446 and 447; Figure 4) for holding down a sheet bundle (P) loaded on the first loading means (350; Col. 3, line 43-49).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel, Endo and Chung to include a sheet hold down means to hold the sheet bundle in place as it is being stapled as taught by Wantanabe, after the sheet bundle has been aligned by the lateral alignment means (418, 412, 412A and 412B; Figure 4 and 23; Chung) and the

longitudinal alignment means (417; Matsumoto). By holding the sheet bundle in place after alignment, the scatter of sheets can be reduced as the sheet bundle is stapled.

12. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view Mandel, Endo and Chung as applied to claim 9 above, and further in view of Fukatsu et al. (U.S. Patent Number 6,382,614).

13. Referring to claims 10-12. Fukatsu discloses an apparatus wherein the sheet bundle conveying means (11 and 12; Figure 1) is a pair of rollers comprising an upper roller (11) and a lower roller (12), and wherein the sheet bundle conveying means can be switched between separation (see position of roller 11 and 12; Figure 1) and nipping (see position of roller 11 and 12 in Figure 6; Col. 5, line 8-57). Rollers (11 and 12; Figure 1) are positioned in a staggered position when the rollers are separated.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Matsumoto in view Mandel, Endo Chung to use a sheet bundle conveying means as taught by Fukatsu comprising a upper roller and a lower roller, which engage and disengage the sheet bundle. Thus, making the conveying means more compact and achieving a reduction in production cost.

### ***Response to Arguments***

14. Applicant's arguments filed 09/28/2007 have been fully considered but they are not persuasive for reasons detailed below.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the movement of the lateral alignment means in claim 1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In specific, the movement of the aligning means is disclosed as occurring between their aligning positions and their respective retreat positions. These two positions as shown in the Applicant's drawings are in a direction perpendicular to the direction of the apparatus sheet conveying. Thus the claimed limitations of the rejected claims read individually or as a combination of the cited references.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, see rejections above.

***Conclusion***

15. Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAKESH KUMAR whose telephone number is (571)272-8314. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rakesh Kumar/  
Examiner, Art Unit 3651

/Gene Crawford/  
Supervisory Patent Examiner, Art  
Unit 3651

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	10/688,389	TAKAMURA, MITSUhide	
	Examiner	Art Unit	
	RAKESH KUMAR	3651	